MAMBO Powerchair

OWNER'S HANDBOOK

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1. PREFACE AND INTRODUCTION

Please carefully read this owner's manual before using the powerchair. Improper use of the power chair could result in harm, injury or traffic accidents.
This owner's manual includes operation instructions for every aspect of the power chair, assembly instructions, as well as instructions on how to avoid possible accidents.
The symbols used in this manual are explained below:

☠ *Warning* Improper use could result in serious injury or death

☞ *Attention* Improper use could lead to injury and/or damage

🕮 *Suggestion* Follow these instructions to keep your powerchair in good working order

- This manual includes a copy of the repair and maintenance record chart and warranty information. Please keep it in a safe place or with the powerchair
- If someone else uses the powerchair, please make sure that you provide them with this owners handbook for his or her consideration.
- As designs change some illustrations and pictures in the manual may not correspond to the powerchair that you purchased. We reserve the right to make design modifications.

The **Mambo** range of powered wheelchairs is part of the Mercury range, and has been designed and manufactured to provide a comfortable and secure yet affordable solution for some mobility requirements. All Mambo powerchairs have a fixed base (not folding) with separate seat. There are three styles and a choice of colours in the Mambo range:

- Mambo Mini – Compact powerchair with single seat post
- Mambo Standard – Larger and more robust powerchair with four post seat system
- Mambo Midwheel – Features rear mounted castors, front anti-tip wheels and drive wheels in the centre for excellent maneouvrability. There are two models of midwheel powerchair available.

Mercury is a brand of Medicare Technology. Medicare Technology is an ISO 9001 and ISO 13485 certified manufacturer of medical devices, mainly for the mobility sector. Other products in the Medicare Technology range include manual wheelchairs, electric scooters, walking aids, bathlifts and bathing equipment, and many more mobility aids. All Medicare Technology medical devices are CE marked.

2. SAFETY NOTICE

2.1 BEFORE DRIVING

The user needs to be familiar with the usage and operation of this powerchair before driving. Therefore, please keep the following safety notices in mind at all times.

- **The same traffic rules apply to the use of this powerchair as apply to pedestrians**
  - For your safety, please follow the rules that apply to pedestrians.
  - Drive on the pavement or pedestrian areas only. Only drive on roads to cross the road or reach the pavement. Never drive on motorways or dual carriageways.
  - Please do not drive your powerchair when you are tired or under the influence of alcohol or drugs.
  - Please be careful when driving your powerchair as evening falls. It has not been designed for use at night.

- **Practice operating your powerchair**
  - Before using the power chair in busy or potentially dangerous areas, familiarize yourself with the operation of your power chair. Please practice in a wide and open area like a park. In order to avoid accidents with your powerchair whilst driving, please bear in mind driving motions, such as accelerating, stopping, turning, reversing, and gradients.
  - Please select the slowest speed setting for your initial practice.
  - Make sure someone accompanies you for safety when driving on the roads for the first time.
  - Only use the higher speed setting when you are confident that you can easily operate and control your powerchair.

- **The Mambo powerchair is only to be used by one person at a time**
  - Do not carry passengers on your powerchair. (including children)

- **Do not use this power chair to carry or haul goods**
  - The maximum weight that can be carried, please refer to "MAX LOAD WEIGHT" in the specification section.

2.2 WHILST DRIVING

- **Please carry out daily inspections.** Refer to the section entitled "DAILY CHECKING"

- **Do not move your body out of the powerchair while moving**
  - Such action may cause you to lose balance and risk injury from falling.
  - Pay attention that your clothes do not tangle in the wheels

- **Do not use your powerchair under the circumstances below.**
  - On roads with heavy traffic or surfaces that are muddy, gravelly, bumpy, narrow, snowed over, icy, or canal towpaths not guarded by any fence or hedge. Keep away from places where you might get the wheels stuck.
  - Do not drive at night or during severe weather conditions (such as rain, snow, etc).
  - Do not drive your powerchair in an "S" pattern or make erratic turnings.
  - Do not take the powerchair onto escalators.
  - UNDER NO CIRCUMSTANCES SHOULD THE POWER CHAIR BE USED AS A SEAT IN A MOTOR VEHICLE (E.G. CARS, BUSES, TRAINS, ETC).

- **About Mobile Phones and other electrical equipment**
  - Do not use a mobile phone or other wireless communication devices whilst driving.
  - Always switch off the powerchair and remove the ignition key before using a mobile phone.
  - Do not charge the mobile phone or any other electrical devices from the batteries of the powerchair.

- **Automatic Power Shut Down**

  In order to avoid accidental battery run down, your powerchair is equipped with an automatic power shut down facility. The powerchair will automatically switch off after 30 minutes if left idle. When this situation occurs, simply switch your powerchair off and back on and it will be ready for use once again.

- **Ramps, inclines and drops**
  - Do not drive onto steep ramps greater than the specified gradient. Refer to the section entitled "CLIMBING ANGLE" in the specification section.
  - Always use a low speed setting when ascending or descending a gradient.
  - Do not drive on roads with large drops or potholes. Refer to the section entitled "MAX. GROUND CLEARANCE" in the specification section.
  - Please slow down when driving on gradients
  - Do not make sudden turns when driving on gravel surfaces or ramps.
  - Always lean forward when climbing a steep gradient.

- **Starting and Driving**

  1. Make sure the seat is installed properly.
  2. Fold down the armrests so that you can rest your arms on them.
  3. Switch the powerchair on.
  4. Check the battery indicator to see whether there is enough power for your journey. If you have any doubt about the remaining power, please recharge the batteries before departure.
  5. Select a speed which you feel safe and comfortable with.
  6. Check the joystick lever works correctly.

7. Make sure the electromagnetic brake works correctly. An audible clicking can be heard when moving the joystick in and out of the neutral position. This sound is the electromagnetic brake applying and releasing.
8. Make sure it is safe around you before you begin your journey.

- **Stopping**
  - Release the joystick control lever completely. The powerchair will naturally brake and stop.
  - Switch the powerchair off.

☠ Warning!

- Do not set in to freewheel mode when driving on a gradient.
- Always re-engage the freewheel levers in to the "DRIVE" position before use. Failure to do so may result in injury.
- For your safety, the power will automatically cut off and the electromagnetic brake system will activate while driving down too steep a gradient. This will limit the speed to a safe level. Switch the power off and on again to re-start your power chair.
- **Maximum User Weight Limit**
- Refer to section entitled "MAX. LOAD WEIGHT" in the specification section. Overloading past the weight limit may lead to damage of your power chair or cause it to malfunction and will endanger your own safety. The warranty does not cover this type of damage.

☞ **Attention**

1. Avoid putting all of your weight on the footrest. This may cause the power chair to tip which could result in injury.
2. Do not switch the powerchair off whilst driving as this will lead to an emergency stop and possible risk of accident and injury.
3. Do not set to the highest speeds while driving indoors.
4. Do not adjust the speed dial while driving. A sudden change in speed may cause danger to you and others, and may cause damage to your powerchair.
5. Do not place magnetic or other electrical devices near the area of the controller as this could affect the safe operation of your powerchair.
6. Be careful whilst driving in heavy traffic or crowded areas.
7. While reversing the powerchair, be aware of people or objects behind you.

- **Inclines and uneven terrain**

When climbing an incline, try to keep your powerchair moving. If you must stop, start up again slowly, and then accelerate cautiously. When driving down an incline, do so slowly and in the forward direction only. If your powerchair starts to move faster than you anticipated or desired, allow the chair to come to a complete stop by releasing the joystick. Push the joystick slightly forward and continue travelling slowly down the incline.

- **Maximum recommended incline**

Extensive testing on gradients has been performed on the Mambo. Our results show that the maximum incline your Mambo can safety climb is six or eight degrees at maximum weight capacity. Five degrees is the angle of most handicap access ramps. Any attempt to climb a larger gradient may put your Mambo in an unstable position.

☞ **Attention:**

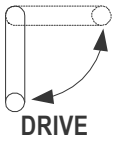
- When climbing an incline, do not zigzag or drive at an angle up the face of the incline. Always drive your Mambo straight up the incline. This greatly reduces the possibility of a tip or a fall. Always exercise extreme caution when negotiating an incline.
- Never travel on a gradient that can be potentially hazardous (for example, areas covered with snow, ice, cut grass, and/or fallen leaves).

2.3 LABELING

Please carefully read all the labeling on the powerchair before you drive. For future reference, do not remove them.

WARNING

Emergency Freewheel Device. Always re-engage the emergency freewheel device after use. Failure to do so may result in injury



EMI WARNING: Please Read

EMI (Electromagnetic Interference) are Radio Waves. Radio Waves can effect wheelchair control. Radio wave sources, such as radio stations, amateur radio (HAM) transmitters, two-way radios, and cellular phones, can affect powered motorized wheelchair. Following the warnings listed below should reduce the chance of unintended brake release or powered wheelchair movement which could result in serious injury.

1. Do not turn ON hand-held personal communication devices, such as citizens band (CB) radios and cellular phones, whilst the wheelchair is turned on.
2. Be aware of nearby transmitters, such as radio or TV stations, and try to avoid coming close to them.
3. If unintended movement or brake release occurs, turn the powered wheelchair OFF as soon as it is safe.
4. Be aware that adding accessories or components, or modifying the powered wheelchair, may make it more susceptible to interference from radio wave sources. (Note: There is no easy way to evaluate their effect on powered wheelchairs.)
5. Report all incidents of unintended movement or brake release to the powered wheelchair manufacturer, and note whether there is a radio wave source nearby.

NEVER LIFT WHEELCHAIR UP BY THE REAR OR FRONT OF SHROUD

3. ELECTROMAGENTIC INTERFERENCE (EMI)

This portion of the content will provide the user with basic information that describes the problems with EMI, known sources of EMI, protective measures either to lessen the possibility or exposure or to minimize the degree of exposure, and suggested action should unexpected or erratic movement occur.

Attention: It is very important that you read this information regarding the possible effects of electromagnetic interference on your **Mambo** powerchair.

3. 1 ELECTROMAGNETIC INTERFERENCE (EMI) FROM RADIO WAVE SOURCES

Powered wheelchair may be susceptible to electromagnetic interference (EMI), which is interfering electromagnetic energy (EM) emitted from sources such as radio stations, TV stations, amateur radio (HAM) transmitters, two-way radios, and mobile phones. The interference (from radio wave sources) can cause the powered wheelchair to release its brakes, move by itself, or move in unintended directions. It can also permanently damage the powered wheelchair's control system. The intensity of the interfering EM energy can be measured in volts per meter (V/m). Each powered wheelchair can resist EMI up to a certain intensity. This is called its "immunity level". The higher the immunity level, the greater the protection. At this time, current technology is capable of achieving at least a 20 V/m immunity level, which would provide useful protection from the more common sources of radiated EMI. This powered wheelchair model as shipped, with no further modification, has an immunity level of 20 V/m without any accessories.
There are a number of sources of relatively intense electromagnetic fields in the everyday environment. Some of these sources are obvious and easy to avoid. Others are not apparent and exposure is unavoidable. However, we believe that by following the warning listed below, your risk to EMI will be minimized.
The sources of radiated EMI can be broadly classified into three types:

1. Hand-held portable transceivers (transmitter-receivers with the antenna mounted directly on the transmitting unit). Examples include: citizens band (CB) radios, "walkie talkies", security, fire, and police transceivers, mobile telephones and other personal communication devices.

Attention:
Some mobile telephones and similar devices transmit signals while they are ON, even when not being used.

2. Medium-range mobile transceivers, such as those used in police cars, fire trucks, ambulances and taxis. These usually have the antenna mounted on the outside of the powerchair .
3. Long-range transmitters and transceivers, such as commercial broadcast transmitters (radio and TV broadcast antenna towers) and amateur (HAM) radios.

Attention: Other types of hand-held devices, such as cordless phones, laptop computers, AM/FM radios, TV sets, CD player, and cassette players, and small appliances, such as electric shavers and hair dryers, so far as we know, are not likely to cause EMI problems to your powered wheelchair.

3.2 POWERED WHEELCHAIR ELECTROMAGNETIC INTERFERENCE (EMI)

Because EM energy rapidly becomes more intense as one moves closer to the transmitting antenna (source), the EM fields from hand-held radio wave sources (transceivers) are of special concern. It is possible to unintentionally bring high levels of EM energy very close to the control system of powerchair while using these devices. This can affect powered wheelchair movement and braking. Therefore, the warnings listed below are recommended to prevent possible interference with the control system of the powered wheelchair.

3.3 WARNINGS

Electromagnetic interference (EMI) from sources such as radio and TV stations, amateur radio (HAM) transmitters, two-way radios, and mobile phones can affect powered wheelchairs. Following the warnings listed below should reduce the chance of unintended brake release or powered wheelchair movement which could result in serious injury.

1. Do not operate hand-held transceivers-receivers, such as citizens band (CB) radios, or turn ON personal communication devices, such as mobile phones, while the powered wheelchair is turned ON;
2. Be aware of nearby transmitters, such as radio or TV stations, and try to avoid coming close to them;
3. If unintended movement or brake release occurs, turn the powered wheelchair OFF as soon as it is safe;
4. Be aware that adding accessories or components, or modifying the powered wheelchair, may make it more susceptible to EMI (Note: There is no easy way to evaluate their effect on the overall immunity of the powered wheelchair).
5. Report all incidents of unintended movement or brake release to the powered wheelchair manufacturer, and note whether there is a source of EMI nearby,

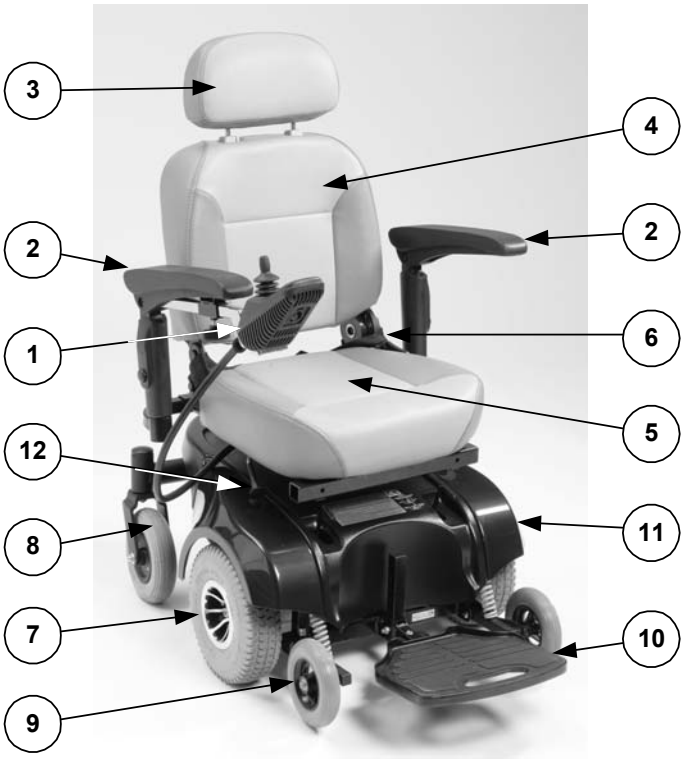
3.4 IMPORTANT INFORMATION

1. 20 Volts per Metre (V/m) is a generally achievable and useful immunity level against EMI (the higher the level, the greater the protection);
2. This product has an immunity level of 20 V/m without any accessories connected to it.

4 PARTS DESCRIPTION

The parts description for the Mambo Mini and Mambo Standard are listed below. The numbers refer to the diagram (right):

1. Controller
2. Armrest
3. Headrest
4. Seat back rest
5. Seat base
6. Back rest recline handle
7. Drive (rear) wheel
8. Castor (front) wheel
9. Foot rest
10. Shroud

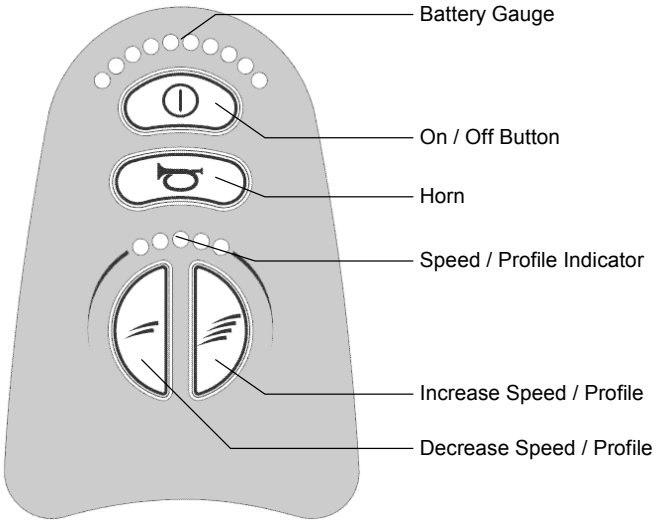


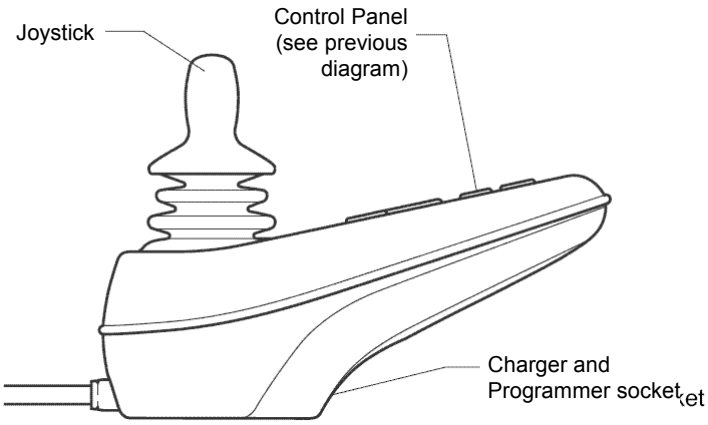
The parts description for the Mambo Midwheel is listed below. The numbers refer to the diagram (left):

1. Controller
2. Armrest
3. Headrest
4. Seat back rest
5. Seat base
6. Back rest recline handle
7. Drive (mid) wheel
8. Castor (rear) wheel
9. Anti-tip (front) wheel
10. Foot rest
11. Shroud
12. Seat rotation lever

5. OPERATION

5. 1 CONTROL PANEL





Joystick Control Panel (shown above)

5. 2 HOW TO OPERATE YOUR POWERCHAIR

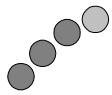
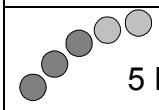
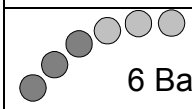
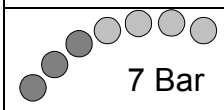
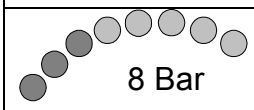
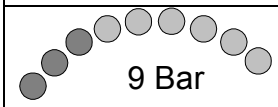
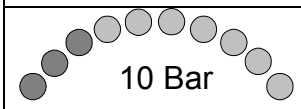
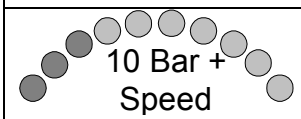
1. **Joystick.** The primary function of the joystick is to control the speed and direction of the wheelchair. The further you push the joystick from the center position the faster the wheelchair will move. When you release the joystick the brakes are automatically applied.
2. **On / Off button.** The on/off button applies power to the control system electronics, which in turn supply power to the wheelchair's motors. Do not use the on/off button to stop the wheelchair unless there is an emergency. (If you do, you may shorten the life of the wheelchair drive components). The battery gauge shows you that the wheelchair is switched on. It also indicates the operating status of the wheelchair.
3. **Increase Speed / Profile.** Press this button to increase the maximum speed of the wheelchair.
4. **Decrease Speed / Profile.** Press this button to decrease the maximum speed of the wheelchair.
5. **Speed / Profile Indicator.** This shows the maximum speed of the wheelchair. The more LEDs are lit, the faster the maximum speed. The wheelchair can be configured to use drive profiles. However, this is not included by default. For more information about drive profiles, contact your dealer. If the speed indicator ripples, this means the wheelchair is locked. By default the locking function is disabled.

   To unlock / lock the wheelchair:
   - Switch the wheelchair on
   - Hold down the on/off button for 1 second (lock only)
   - Deflect the joystick forwards until the control system bleeps
   - Deflect the joystick backwards until the control system bleeps
   - Release the joystick. There will be a long bleep and the wheelchair will be unlocked / locked.

6. **Horn**. Press this button to sound the horn. The horn will stop when you release the button.
7. **Battery Gauge.** This shows the battery power level of the wheelchair.

- The more LEDs that are lit, the more power is left in the battery. The LEDs will be lit constantly when the wheelchair is operating normally.

- If the LEDs on the battery gauge are stepping up (i.e. the number of LEDs lit quickly increases then resets to 1), the battery charger is connected and the wheelchair drive inhibited.
- If the battery gauge is flashing slowly then the wheelchair is operating normally, but the batteries need recharging as soon as possible.
- If the battery gauge LEDs are flashing rapidly this indicates a fault with the wheelchair. If you have a problem with your wheelchair consult the table overleaf. If the problem persists after you have followed the advice overleaf then restarted the wheelchair, contact your dealer.

Display	Notes
1 Bar	The battery needs charging or there is a bad connection to the battery. Check the connections to the battery. If the connections are good, try charging the battery.
2 Bar	The left hand motor has a bad connection. Check the connections to the left hand motor.
3 Bar	The left hand motor has a short circuit to a battery connection. Contact your service agent.
 4 Bar	The right hand motor has a bad connection. Check the connections to the right hand module.
 5 Bar	The right hand motor has a short circuit to a battery connection. Contact your service agent.
 6 Bar	The wheelchair is being prevented from driving by an external signal. The exact cause will depend on the type of wheelchair you have, one possibility is the battery charger is connected.
 7 Bar	A joystick fault is indicated. Make sure that the joystick is in the centre position before switching on the control system.
 8 Bar	A control system fault is indicated. Make sure that all connections are secure.
 9 Bar	The parking brakes have a bad connection. Check the parking brake and motor connections. Make sure the control system connections are secure.
 10 Bar	An excessive voltage has been applied to the control system. This is usually caused by a poor battery connection. Check the battery connections.
 10 Bar + Speed	This is where the Speed Indicator and 10 bars are lit. A communication fault is indicated. Make sure that joystick cable is securely connected and not damaged.

5.3 EXTENDABLE CONTROLLER BRACKET

Your Mambo powerchair is equipped with an extendable controller bracket. To extend or retract the bracket, first slacken the knob located underneath the armrest (shown by arrow) and then reposition the controller as required. Retighten the knob to secure.

Please see the photograph on the left.

The armrests can also flip up to allow improved access to tables, desks, etc

5.4 BRAKING

Electromagnetic braking: Release the joystick on the controller and the electromagnetic brakes will automatically operate and the powerchair will stop. At first this can be a strange sensation which is why we recommend we an initial practice session with the powerchair as described in the Safety Notice.

☠ **Warning:**
Putting the motors in to freewheel mode also disengages the brakes. When on a gradient never switch the powerchair in to freewheel mode as the electromagnetic brakes will not be applied. This may result in injury.

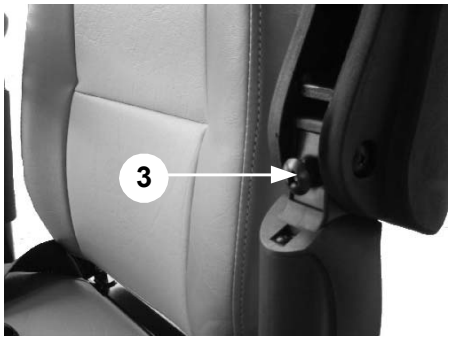
5.5 HOW TO ADJUST THE SEAT

To adjust the seat back angle:

- Pull up the seat back recline lever (arrow 1 opposite).
- Adjust the seat back to the required position.
- Release lever.

To adjust the armrest width:

- Loosen the tri-knobs (arrow 2 opposite).
- Slide the armrests to the required width.
- Retighten tri-knobs.

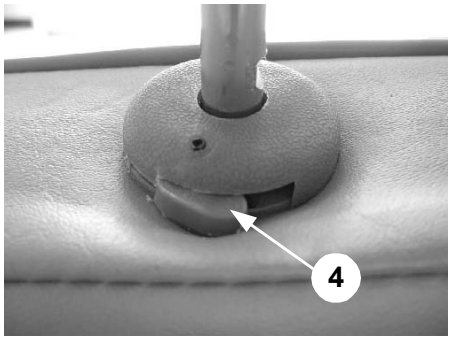


To adjust the armrest angle

- Lift up armrest
- Loosen the jam nut (arrow 3 opposite)
- Adjust the socket screw up or down to the desired arm angle position.
- Retighten the jam nut
- To determine the same angle for the opposite armrest, measure the protrusion or count up the number of threads on the bolt.
- Repeat process for other armrest

To adjust the armrest height

- Push the plastic button on the side of the armrest (see photo left)
- Reposition to the desired height
- Release the button



To adjust the headrest

- To raise the headrest, lift the headrest up to the required position
- To lower the headrest, push the release tab (arrow 5 opposite)
- Lower the headrest to the required position and release the tab

5.6 REMOVAL & HEIGHT ADJUSTMENT OF THE SEAT (MAMBO MINI)

To remove the Mambo Mini seat:

- Switch the Mambo off and ensure it is not in freewheel mode
- Disconnect the controller or remove the armrest on which the controller is mounted
- Slacken the tri-knob securing the seat post in the seat post receiver on the powerchair base
- Unlock the locking pin and remove from the seat post.
- Lift up the seat to remove

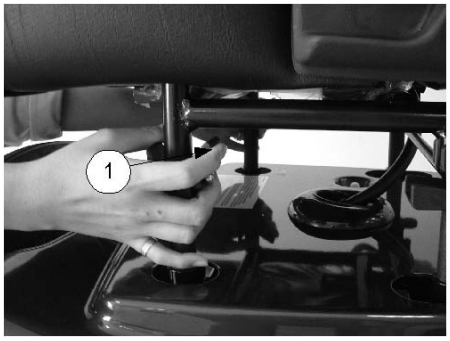
To install the Mambo Mini seat:

- Reverse the procedure above ensuring that the seat locking pin is securely locked and that the tri-knob is sufficiently tightened

To adjust the Mambo Mini seat height:

- Remove the seat following the procedure above
- On the removed seat there is a rectangular collar which determines the seat height
- Remove the locking pin from the rectangular collar and adjust the collar for the required seat height
- Reinsert the locking pin to secure the rectangular collar
- Reinstall the seat following the procedure above.

5.7 REMOVAL & HEIGHT ADJUSTMENT OF THE SEAT (MAMBO STANDARD)



To remove the Mambo Standard seat:

- Switch off the Mambo and make sure it is not in freewheel mode
- Remove the armrest with the controller attached
- Simultaneously depress the two plungers (arrow 1 opposite) on the front of the seat frame while lifting the front of the seat
- Lift the seat up and gently lower it back on to the rear seat towers
- Pull the seat forward and lift it off the rear seat towers

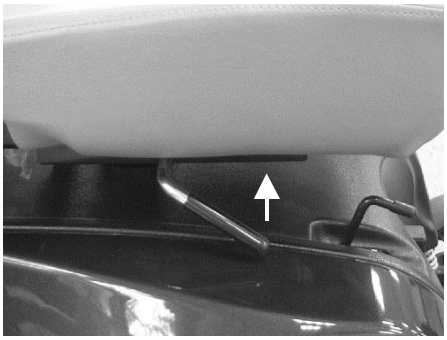
To install the Mambo Standard seat:

- Reverse the procedure above, ensuring the seat is locked in position both at the rear and via the two plungers at the front

To adjust the Mambo Standard seat height:

- Remove the seat using the procedure previously described.
- Remove the shroud
- Disengage and remove the seat height adjustment pin from the seat post
- Raise or lower each post to the required position
- Reinstall the seat height adjustment pin through the seat post
- Reinstall the shroud and seat and reconnect any parts disconnected during adjustment.

5.8 MAMBO MIDWHEEL SEAT OPERATION



Rotating the Seat

- The seat can rotate 180°, and the seat locks at 45° intervals. This allows the user to swivel the seat to the left or right for easier access to desks, tables, etc.
- To rotate the seat, first push up on the seat rotation lever. Whilst holding the lever, swivel the seat in to the required position. Then release the lever and continue swiveling the seat until it locks in position.

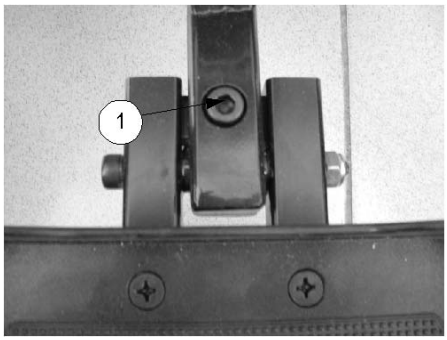
To remove the seat:

- Ensure the powerchair is switched off and not in freewheel mode.
- Push up on the seat rotation lever, and rotate the seat slightly so it is not locked in position.
- Pull up on the seat to remove, taking caution as the seat is heavy

To change the seat height

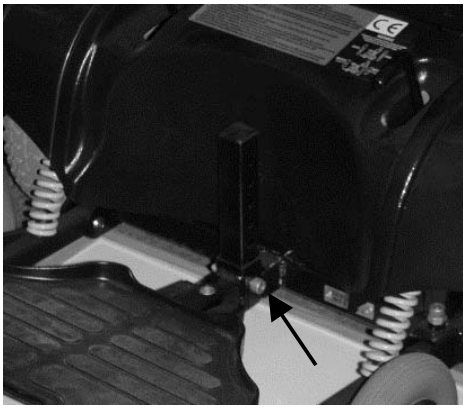
- Remove the seat, as described above and remove the shroud.
- Release the seat post camlock mounted on the seat post receiver.
- Disengage and remove the seat height adjustment bolt from the seat post.
- Reposition the seat post at the desired height.
- Reinsert the bolt in to the seat post and secure with the nyloc nut.
- Lock the seat post in position with the seat post camlock.
- Reinsert the seat, as described above.

5.9 HOW TO ADJUST THE FOOTREST



To adjust the footrest angle

- You can adjust the angle of the footrest with a M6 allen key
- Turn the setscrew (arrow 1 opposite) clockwise to raise the front of the footrest
- Turn the setscrew (arrow 1 opposite) anticlockwise to lower the front of the footrest



To adjust the footrest height

- Remove the nut and bolt securing the footplate bracket (shown by arrow in the photograph).
- Adjust the bracket to the required height.
- Reattach the bracket to the powerchair using the nut and bolt.

5.10 HOW TO SET FREEWHEEL MODE

For your convenience, your Mambo powerchair is equipped with a freewheel lever. This allows you to disengage the drive motors and electromagnetic brakes so you can manoeuvre the powerchair manually.

To engage the powerchair in DRIVE mode

- It is advisable to ensure the powerchair is switched off
- Turn the freewheel lever on both motors to the DRIVE position
- Switch the powerchair on and use as normal

Above: Freewheel lever

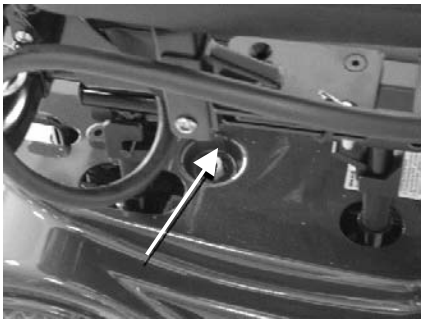
To engage the powerchair in FREEWHEEL mode

- Switch off the powerchair
- Turn the freewheel lever on both motors to the FREEWHEEL position
- Manoeuvre the powerchair manually

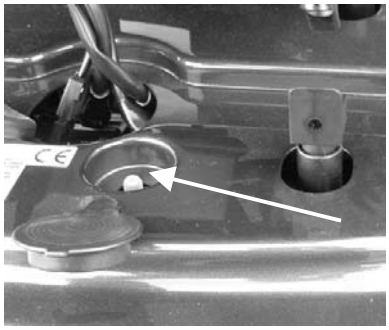
☠ Warning:
Do not use the powerchair whilst the drive motors are disengaged unless you are in the presence of an attendant. Do not disengage the drive motors when the powerchair is on a gradient. The powerchair could roll down on its own, causing injury or damage.

5.11 CIRCUIT BREAKERS

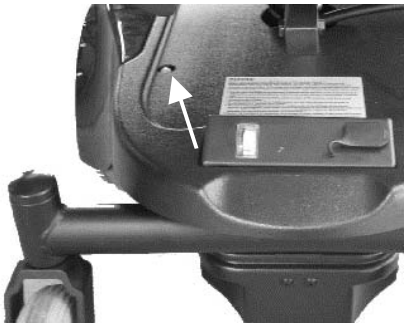
- Your Mambo powerchair has a circuit breaker protruding through the shroud cover in the positions shown on in the photographs below.
- In the unlikely event of a short circuit or heavy overload, all power to your powerchair will be shut off.
- To reset the circuit breaker, press the circuit breaker button. The circuit breaker will then reset after a few minutes.
- If the powerchair continues to shut down after resetting contact your Medicare Technology dealer.
- With some shroud styles the circuit breaker is recessed in to the shroud and covered by a rubber flap. To gain access to the circuit breaker simply lift up the rubber flap. (As shown in the central photograph below).



Mambo Mini circuit breaker



Mambo Standard circuit breaker



Mambo Midwheel circuit breaker

6. BATTERY CHARGING AND CARE

6.1 BATTERIES

Always fully recharge the batteries after use. Never drain the batteries down until they are totally flat. For ease of maintenance and reliability, all the Mambo powerchairs use off-board chargers.

To recharge the powerchair, follow the procedure below step by step:

1. Switch off the powerchair.
2. Connect the charger's power cord onto the power outlet.
3. Locate the 3-pin charging socket at the end of the controller. Then connect the charger's round plug to the charging socket.
4. Turn on the switch on the charger. The charger should have an orange LED illuminated when charging which will turn green when the bulk of the charging is complete.
5. To ensure optimum performance a 12 hour charge is recommended.

🕮 Suggestion

1. Do not disconnect the charger cord if charging is not complete. The battery life will be seriously shortened or decayed if the battery is repeatedly used without being fully charged. Therefore be sure to charge the battery fully every time.
2. Always complete the charging until the charge LED light turns green. NEVER stop charging before it is complete.
3. When fully charged, the battery charger will still trickle charge the battery to ensure optimum range.
4. If you do not use your powerchair for a long time, it should be charged at least every week to keep the battery in a fully usable condition.
5. Charging time will be affected by the ambient temperature. Charging time will be longer in the winter.
6. After charging, do not leave the charger socket plugged in to the powerchair, as this will cause a power drain on the powerchair and temporarily reduce it's range.
7. The batteries carry a twelve-month manufacturer's warranty. This warranty only covers issues relating to manufacturing faults, and not faults relating to failure to recharge the batteries as instructed above.

Attention: Please follow the rules below to avoid accidents while charging.

1. Please use Mercury 24V chargers only, and recharge the battery to its full capacity every time. You may damage the battery and powerchair if you use a charger which is not to the correct specification.
2. Never disassemble or modify the charger.
3. Please charge in a well-ventilated space where it is not directly exposed to the sunlight. Do not charge in surroundings where it is humid or under rainfall and morning dews.
4. Do not cover with a waterproof cloth or other objects while charging.
5. Do not charge in temperatures less than -10°C or higher than +50°C as the charger may not work well and the batteries may become damaged.

☠ Warning

1. Keep away from flammable objects whilst charging as it may lead to fire or explosion of the battery.
2. Do not smoke whilst charging as the battery may release hydrogen gas. Always charge your battery in a well-ventilated area.
3. Never connect or disconnect the plug or cord with wet hands whilst charging. Do not connect or disconnect the plug or cord when they are wet, it may lead to an electric shock.

6.2 CHARGER

Both the charger's red and orange LED will be switched ON during charging. The orange LED will turn green when bulk charging is completed.

6.3 BATTERY

- Do not expose the battery to temperatures below -10°C or above 50°C when charging or storing the vehicle. Being out of the above temperature range can cause the battery either to freeze or over heat. This will damage the batteries and shorten their life.
- These batteries are maintenance free and there is no need to inspect the battery liquid or refill with water.
- You are required to recharge the batteries on a regular basis. Even if the powerchair is stood idle, you should charge the batteries at least once a week or following use of the powerchair.

☠ Warning

Do not open the battery sealed cap at any time.

■ Cleaning the battery

If the batteries are contaminated by water, battery acid, dust or other substances, they will discharge quickly. The batteries supplied with the Mambo powerchair are sealed and so should generally be maintenance free with no risk of battery leakage. Please follow the following steps to clean the battery:

1. Turn the powerchair power switch to OFF.
2. Remove the seat and remove shroud.
3. Use a clean cloth to wipe off the soiled area.
4. Take out the battery.
5. Clean the battery with a clean cloth. If the terminal is covered by white powder, please wipe it clean using warm water.

🕮 Suggestions

If necessary, ask for help from your Medicare Technology dealer for advice about maintaining and replacing the battery.

🕮 Suggestions

1. Make sure the terminals are installed properly and put the cover back on.
2. Do not use the battery to charge telecom equipment or other items.
3. Battery efficiency will vary with outside conditions, the driving distances will be shorter in the winter. If the vehicle is not used for a long time, please charge the battery at least every week.
4. In the event of battery failure, both batteries should be replaced.

7. INSPECTION AND MAINTENANCE

7.1 INSPECTION

Initial adjustments should be made to suit personal body structure and preference. Thereafter, follow these maintenance procedures. Items under column A should be checked initially, column B weekly, column C monthly and column D periodically.

No	Item	A	B	C	D
1	General (Mechanical Troubleshooting)				
	♦ Powerchair rolls straight (no excessive drag or pull)	A			D
2	Arms				
	♦ Secure but easy to release; adjustment levers engage properly	A			D
	♦ Adjustable height arms operate and lock securely	A			D
	♦ Pivot point free of wear and looseness	A		C	
3	Seat and Back Upholstery				
	♦ Inspect for rips or sagging	A			D
4	Seat				
	♦ Seat secured to the powerchair frame	A	B		
	♦ Inspect seat release latches	A			D
5	Drive Wheel				
	♦ Mounting bolts are secure	A			
	♦ No excessive side movement or binding when lifted and spun when in freewheel	A			
6	Castor Assemblies				
	♦ Bolts are tight	A		C	
	♦ Inspect the castor assembly for correct tension by spinning the castor assembly; the castor assembly should come to a gradual stop.	A		C	
	♦ **Attention: As with any powerchair, the wheels and tyres should be checked periodically for cracks and wear, and should be replaced if necessary**				
7	Castor Assemblies / Wheel				
	♦ Ensure all fasteners are secure	A	B		
8	Wheels / Tyres				
	♦ Inspect for flat spots and ensure all fasteners are secure	A	B		
	♦ **Attention: As with any powerchair, the wheel and tyres should be checked periodically for cracks and wear, and should be replaced if necessary**				
9	Cleaning				
	♦ Clean upholstery and armrests	A			D

7.2 REGULAR SERVICE RECORD

To make sure your powerchair is correctly serviced, take it to your dealer for a regular maintenance check. This should be at intervals of six months after the first inspection which should be completed after one month. Your dealer may charge a fee for this.

YEAR	1m	6m	1	2	3	4	YEAR	1m	6m	1	2	3	4
Service Dates							Service Dates						
Controller							Upholstery						
On/off switch							Seat						
Joystick							Back						
Braking							Armrests						
Recharge point							Electrics						
Batteries							Connections condition						
Levels							Utility tray						
Connections							Test run						
Discharge test							Forwards						
Wheels and Tyres							Reverse						
Wear							stop						
Pressure							Left turn						
Bearings							Right turn						
Wheel nuts							Slope test						
Motors							Over obstacles						
Wiring							List Items repaired						
Noise													
Connections													
Brake													
Brushes													
Chassis/Footrest													
Condition													
Footrest													

7.3 BATTERY, FUSE AND TYRES

- **Battery**
- ♦ Refer to the section entitled “BATTERY CHARGING AND CARE”

- **Fuse**
- ♦ If the battery charger is turned on and no LEDs are lit, check the fuses both in the charger and mains lead.

- **Tyres**
- ♦ The condition of the tyres depends on how you drive and use your powerchair. For optimum tyre peformance:
- ♦ Inspect the tyre tread
- ♦ Check the tread depth regularly. Replace the tyres when the tread depth is less than 0.5mm.

☞ **Attention**

1. When tread depth is below 0.5mm it can easily lead to powerchair slippage, making braking distances longer. Therefore replace the tyres as early as possible when they are found to have insufficient tread depth.
2. The tyre pressure (rear tyre) shall be kept at about 26 PSI (approx. 1.8 bar) for the best drive performance and handling.

☞ **Attention**

When conducting maintenance of your powerchair, please turn the power switch to OFF and remove the charger cords.

🕮 **Suggestions**

1. Do not splash water directly to wash your powerchair as this could lead to malfunction of the system electrics.
2. Do not use petrol, solvents or vaporizing solution as these may deform or damage the shrouds.
3. Do not use wax.

7.4 STORAGE

- Ensure that the powerchair is stored under the following conditions:
  - Ensure the charger is unplugged from the powerchair and the mains
  - Make the powerchair is switched off.

🕮 **Suggestion**

Please store the powerchair in a location where it is out of direct sunlight, rain, or dew. When storing for a long time, please charge the battery to full power and then disconnect the battery terminals. For details contact your Medicare Technology dealer.

8. TROUBLESHOOTING AND SPECIFICATION

8.1 TROUBLESHOOTING

SYMPTOM	PROBABLE CAUSE	SOLUTION
Limited driving distance	♦ Batteries not charged long enough. ♦ Batteries weak, won't hold charge.	♦ Ensure batteries are charged for 12 hours before using. Make sure you are using the correct charger and the charger is working. ♦ Replace batteries
Batteries not charging.	♦ Charger not working ♦ Battery connections loose. ♦ No power from mains ♦ Bad connection on charger, charger cable, plug or an internal wiring problem.	♦ Replace charger. ♦ Check all connections. Secure connections. ♦ Try another mains socket ♦ Replace charger or internal repairs required. Contact dealer.
Batteries draw excessive current when charging.	♦ Battery failure.	♦ Replace batteries
Charge indicator shows low charge level immediately after charging.	♦ Batteries weak, won't hold charge. ♦ Electrical malfunction. ♦ Charger not operating.	♦ Replace batteries ♦ Contact dealer ♦ Investigate batteries and charger
Battery indicator flashes the charge level is low-too soon after being recharged.	♦ Have charger checked. ♦ Weak batteries.	♦ Service or replace charger. Contact dealer ♦ Replace batteries
Wheel chair will not drive	♦ Freewheel levers disengaged. ♦ Batteries require charging. ♦ Charger plugged in. ♦ Circuit breaker tripped.	♦ Ensure freewheel levers are in DRIVE position ♦ Charge batteries. Make sure setting on charger is correct. ♦ Unplug charger from mains socket and powerchair. ♦ Reset breaker. If breaker trips again, it may indicate need for internal repairs.
Motor "chatter" or runs irregularly.	♦ Electrical malfunction.	♦ Contact dealer
Joystick erratic or does not respond as desired.	♦ Electrical malfunction. ♦ Controller programmed improperly.	♦ Contact dealer ♦ Contact dealer
Only one (1) rear wheel turns.	♦ Electrical malfunction. ♦ One (1) freewheel lever is engaged.	♦ Contact dealer ♦ Ensure freewheel levers are in DRIVE position
Wheelchair does not respond to commands. Power indication off-even after recharging.	♦ Poor battery terminal connection. ♦ Electrical malfunction.	♦ Clean terminals. ♦ Contact dealer

8.2 SPECIFICATION

MODEL ITEM	Mambo Mini	Mambo Standard	Mambo Midwheel 361	Mambo Midwheel 363
Dimensions (L×W×H cm) (L×W×H inch)	97 × 56 × 106cm 38" × 22" × 42"	103 × 63½ × 112cm 40½" × 25" × 44"	107 x 59 x 103cm 42" x 23" x 40¼"	109 x 64 x 106cm 42¾" x 25" x 41½"
Weight,with batteries Kg (lbs) Without batteries Kg/lbs	81kg (178.2lb) 58.8kg (129.4lb)	99.8kg (219.5lb) 70.2kg (154.4lb)	83.2kg (183lb) 61.2kg (134.6lb)	105.5kg (232lb) 80.5kg (177lb)
Battery	12V 36Ah×2	12V 50Ah×2	12V 36Ah×2	12V 36Ah x 2
Motor	200W×2	320W×2	450W × 2	450W x 2
Charger	DC24V 5A Off-board	DC24V 5A Off-board	DC24V 4A Off-board	DC24V 3A Off-board
Castor wheels	8"×2" Solid	9"×2" Solid	8"×2" Solid	6" x 2" solid
Drive wheels	10"×2" Pneumatic	12"×2" Pneumatic	10"×2" Solid	10" x 2" solid
Driving system	Direct drive (rear wheel)	Direct drive (rear wheel)	Direct drive (mid wheel)	Direct drive (mid wheel)
Brake system	Electromagnetic brakes	Electromagnetic brakes	Electromagnetic brakes	Electromagnetic
Top speed	6.4 kph /4mph	6.4 kph /4mph	6.4kph / 4mph	6.4kph / 4mph
Climbing angle	8°	8°	6°	8º
Cruising range	38km / 23.6miles	38km / 23.6miles	35km / 21.8 miles	30km / 18.6 miles
Turning radius (cm/inch)	51cm / 20"	54cm / 21"	51cm / 20"	77cm / 30"
Armrests	Height, width & angle adjustable	Height, width & angle adjustable	Height, width & angle adjustable	Height, width & angle adjustable
Footrest	Height & angle adjustable	Height & angle adjustable	Height & angle adjustable	Height & angle adjustable
Max.user weight	113kg (250lb)	136kg (300lb)	161kg (350lb)	136kg (300lb)
Controller	P&G VR2 50(70)	P&G VR2 50(70)	P&G VR2 50(70)	P&G VR2 50(70)

Remark : The manufacturer reserves the right to modify the specification if necessary. The final specification is subject to the individual powerchair you purchase from your dealer.

Note:

Maximum driving distance is based on an ambient temperature of 20ºC, a 75kg driver, a brand new fully charged battery, a constant driving speed at 4/5 mph with 70% battery power discharged.

9. WARRANTY

9.1 VIN (POWERCHAIR INDENTIFICATION NUMBER)

To ensure the correct after sales service and warranty service support, please write down the powerchair serial number that is stuck on the back right-hand side of the frame.

Model			
VIN			
Motor serial #		Controller #	

9.2 WARRANTY CONDITIONS

There is a comprehensive twelve-month warranty from the date on which your new power chair is delivered. The warranty covers the powerchair for repairs or replacement during this period. For more detail, please see the Warranty Conditions below.

Warranty Conditions:

1. Any work or replacement part installation must be carried out by an authorized Medicare Technology dealer / service agent.
2. To apply the warranty should your powerchair require attention please contact who you bought the powerchair from.
3. Should any part of the powerchair require repair or full or part replacement, as a result of a manufacturing or material defect within twelve months of receiving the powerchair, replacement parts will be supplied free of charge.
   Note: This guarantee is not transferable
4. Any repaired or replaced parts will be covered by this warranty for the balance of the warranty period on the powerchair.
5. Parts replaced after the original warranty has expired will by covered by a three months warranty.
6. Consumable items supplied will not generally be covered during the normal warranty period unless such items require repair or replacement clearly as a direct result of a manufacturing or material defect.
   Such items include (among others): upholstery, tyres and batteries.
7. The above warranty conditions apply to brand new powerchair purchased at the full retail price. If you are unsure whether your power chair is covered, check with the service agent.
8. Under normal circumstances, no responsibility will be accepted where the powerchair has failed as a direct result of:
   a) The powerchair or part not having been maintained in accordance with the manufacturer's recommendations.
   b) Failure to use the manufacturer's specified parts
   c) The powerchair or part having been damaged due to neglect, accident or improper use
   d) The powerchair or part having been altered from the manufacturer's specifications or repairs having been attempted before the service agent is notified

Please note your local service agent's contact details. In the event of your powerchair requiring attention, contact them and give all relevant details so they can act quickly.

The manufacturer reserves the right to alter without notices any weights, measurements or other technical data shown in this manual. All figures, measurements and capacities shown in this manual are approximate and do not constitute specifications.

11. ABOUT MEDICARE TECHNOLOGY

A wide range of accessories are available for the Rio range

Batteries, Comfy Clothing, and Scooter Alarms

As well as the above, there are a number of larger scooters and general scooter accessories available from your Medicare Technology dealer

Your Mambo Powerchair is a **Mercury** branded product. **Mercury** is a brand of Medicare Technology Ltd.

Medicare Technology is a high quality ISO 9001 and EN46001 certified Medical Device Manufacturer. All Medicare Technology medical devices are CE marked.

Other products in the Medicare Technology range include **wheelchairs, powerchairs, walking aids, bathlifts, rise recline armchairs and other daily living aids.**

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